REMARKS

Claims 1-15 are pending in the present Application. Consequently, claims 1-15 remain pending in the present Application.

Applicant has amended independent claims 1, 7, 8, 14 and 15 to recite that the application interfaces with an operating system on the development system and that the emulation module interfaces directly with the operating system. Support for the amendment can be found in Figure 3 of the specification. Accordingly, Applicant respectfully submits that no new matter is added.

This application is under Final Rejection. Applicant has also presented arguments hereinbelow that Applicant believes should render the claims allowable. In the event, however, that the Examiner is not persuaded by Applicant's arguments, Applicant respectfully requests that the Examiner enter the Amendment to clarify issues upon appeal.

In the above-identified Office Action, the Examiner rejected claims 1-15 under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 5,088,033 ("Binkley") in view of U.S. Patent No. 5,812,668 ("Weber"). In so doing, the Examiner appeared to acknowledge that Binkley did not teach a point of sale system. Instead, the Examiner relied upon Weber to disclose a point of sale system. In response to Applicant's arguments, the Examiner also indicated that in concluding that Weber discloses emulation in a point of sale environment, the "production computer [that includes the test gateway] represents the pos system or the present invention, the merchant-controlled computer represents the development system of the present invention, the simulated transaction responses that include configuration data for the merchant-controlled computer represent the emulation element and the test gateway computer represents the emulation environment."

Applicant respectfully traverses the Examiner's rejection. Claims 1, 7, 8, 14 and 15 recite methods, a system and a computer-readable media for developing an application on a development system independently of a point of sale system. The application is for use with point of sale

equipment having a device. The application is capable of utilizing the device when the application is executed on the point of sale equipment. Independent claims 1, 7, 8, 14 and 15 recite methods, a system and computer readable media, which are used to emulate the environment, including a device in a point of sale system. This emulation is achieved using emulation modules that are interfaced directly with the operating system, which interfaces with the application being developed. Because the emulation objects are coupled to the operating system, rather than replacing portions of the application, the method and system in accordance with the present invention can give the developer a more accurate indication of the behavior of the application. Specification, page 11, lines 9-14 and page 14, lines 8-11. Furthermore, as discussed in previous responses, method, system or computer readable medium that is used to emulate an interaction between an application and a point of sale system and that the emulation module used emulates devices that are particular to the point of sale system.

Binkley in view of Weber fail to teach or suggest a method, system, or computer readable medium in which the emulation object is interfaced directly with the operating system. Binkley in view of Weber fails to teach or suggest a method, system or computer readable medium that is used to emulate an interaction between an application and a point of sale system and that the emulation module used emulates devices that are particular to the point of sale system.

Binkley does describe a system used in emulating a "target system." Binkley, col. 1, lines 60-62. More specifically, Binkley appears to be directed at a system which provides a separate "emulating processor" that allows the processor of the host system to continue normal operation and emulates the functions of the target system. Binkley, col. 2, lines 25-35 and Abstract, lines 1-7. In other words, the emulating processor function as though it were the central processor of the system being emulated. Binkley, col. 6, lines 39-52. The host processor provides the emulated environment, mimicking devices of the target system. Binkley, col. 6, line 66-col. 7, line 1.

However, the host processor apparently provides an emulated environment for the emulating processor using hardware interfaces of the host system. Binkley, col. 7, lines 1-4 and Figs. 1-2. In other words, the host system provides inputs and accepts outputs over hardware interfaces to mimic devices that would normally be connected to the system being emulated. Binkley, col. 7, lines 17-62; col. 8, lines 5-30; and Fig. 3. In addition, as previously discussed, Binkley is directed very generally to emulation of systems on which an application is to run.

Applicant can find no mention in Binkley of interfacing the emulation modules directly with the operating system. Instead, to the extent that Binkley teaches that the emulation occurs over the *hardware* interfaces, Binkley teaches away from interfacing the emulation modules directly with the operating system. Consequently, Binkley does not teach or suggest a method, system or computer-readable medium in which the emulation modules are interfaced directly to an operating system which interfaces with the application being developed. Further, Applicant can find no mention in Binkley of a point of sale system. Applicant can find no mention in Binkley of any mechanism for developing applications for a point of sale system. Consequently, although Binkley does teach that conventional devices associated with a computer can be emulated using a combination of hardware and software, Binkley neither teaches nor suggests interfacing emulation modules directly to the operating system. Further, because Binkley fails to describe a point of sale system, Binkley also fails to teach or suggest emulation modules for emulating the specialized devices, such as scales, often used in conjunction with a point of sale system.

Weber fails to remedy the defects of Binkley. More specifically, Binkley in view of Weber fail to teach or suggest interfacing an emulation module directly with an interface of an operating system that interfaces with the application being developed. Furthermore, Binkley in view of Weber fail to teach or suggest emulating specialized devices used with point of sale applications.

Weber describes a technology for use with a point of sale system. The cited "test gateway" is used in conjunction with the actual point of sale system. See Weber, col. 61, line 15-col. 63, line 7. In particular, the test gateway is used with a "generic POS [point of sale]" system for a merchant, the actual point of sale system. Weber, col. 61, lines 41-48. The test gateway allows the merchant to customize the merchant's portion of the point of sale system to the production computer. Weber, col. 62, line 13-col. 63, line 8 and Fig. 50 (describing the "customization" process including communication with the test gateway for example of a bank's computer). The test gateway of Weber is thus used in conjunction with the actual point of sale system (including the actual point of sale devices). Consequently, no separate development system having an operating system is described in Weber. Thus, no specialized devices in the merchant's point of sale system are mimicked using the system of Weber. For similar reasons, Weber does not describe emulating devices on the merchant's point of sale system during development of a point of sale application by providing emulation modules directly interfaced with the operating system.

Applicant has found no mention in Weber of emulating devices by providing an emulation module interfaced directly with the operating system of the development system. Consequently, any combination of Weber and Binkley would also fail to teach this feature.

In addition, Binkley in view of Weber fail to teach or suggest emulating the specialized devices often used in conjunction with point of sale equipment. Applicant respectfully disagrees that the merchant-controlled computer can represent the development system of the present invention and that the production computer represents the point of sale system. As previously discussed, a point of sale system "is physically located where the sales are made. . ." and often includes specialized devices, such as scanner or other equipment. Specification, page 1, lines 10-16. In the system of Weber, it is the merchant's computer that is located where the sales are made and that may include such specialized devices. Further, Weber specifically refers to the merchant's

system as the point of sale system. The bank's computer (the cited production computer) is typically physically remote from the merchant's computer and, due to the merchant's point of sale system, need not include specialized devices. Instead, the bank's computer communicates with the merchant's computer. Thus, the production computer of Weber is not the point of sale system. Instead, the merchant's computer is the point of sale system and includes an *already developed* point of sale application that is merely being customized or being used in a teaching mode by the merchant. Consequently, there is no need in Weber to mimic any "specialized devices" which would be used with a point of sale system and no need for the recited emulation modules.

Moreover, even if it is assumed that the production computer can be considered the point of sale system (to which Applicant disagrees), the test gateway does not emulate the responses of the merchant's system. Instead, as described above, the test gateway facilitates communication between an existing merchant's point of sale system. Although the test gateway allows the merchant's point of sale system to be configured to the bank's computer, the merchant's point of sale system need not be emulated because it is coupled with the test gateway. Thus, the test gateway does not emulate specialized devices for a point of sale system. Weber, therefore, does not teach or suggest emulation modules, used in conjunction with an application for a point of sale system, that emulate specialized devices for the point of sale system.

Thus, Binkley in view of Weber fails to teach or suggest interfacing emulation modules directly with an operating system of the development system. Binkley in view of Weber also fail to teach or suggest emulating the specialized devices often connected to a point of sale system. Consequently, Binkley in view of Weber also fails to teach or suggest the methods, system and computer readable media recited in claims 1, 7, 8, 14, and 15. Accordingly, Applicant respectfully submits that claim 1, 7, 8, 14 and 15 are allowable over the cited references.

Claims 2-6 depend on independent claim 1. Claims 9-13 depend on independent claim 8.
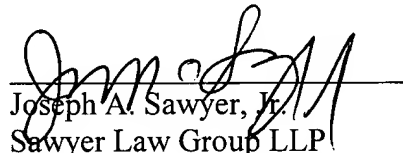
Consequently, the arguments herein apply with full force to claims 2-6 and 9-13. Accordingly, Applicant respectfully submits that claims 2-6 and 9-13 are also allowable over the cited references.

Accordingly, for the above-mentioned reasons, Applicant respectfully submits that the claims are allowable over the cited reference. Consequently, Applicant respectfully requests reconsideration and allowance of the claims as currently presented.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned **"Version with markings to show changes made"**.

Applicant's attorney believes that this application is in condition for allowance. Should any unresolved issue remain, the Examiner is invited to call Applicant's attorney at the telephone number indicated below.

Respectfully submitted,

Joseph A. Sawyer, Jr.
Sawyer Law Group LLP
Attorney for Applicant(s)
Reg. No. 30,801
(650) 493-4540

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

1. (Amended) A method for providing a point of sale environment for developing an application on a development system independently of a point of sale system, the application for use with point of sale equipment having a device, the application capable of utilizing the device when the application is executed on the point of sale equipment, the application interfacing with an operating system on the development system, the method comprising the steps of:

(a)   providing an emulation module interfacing directly with the operating system and corresponding to the device;

(b)   ensuring that the application will utilize the emulation module when the application is executed on the development system; and

(c)   executing the application on the development system independently of the point of sale system, wherein the emulation module and the application emulate the interaction between the application and the device that occurs when the application is executed on the point of sale equipment;

wherein the device is specialized for the point of sale equipment.

7. (Amended) A method for testing an application on a development system having an operating system, the application for use with point of sale equipment having a device, the application interfacing with the operating system and being capable of utilizing the device when the application is executed on the point of sale equipment, the method comprising the steps of:

(a)   providing an emulation object interfacing directly with the operating system and corresponding to the device;

(b)   ensuring that the application will utilize the emulation object when the application is executed on the development system;

(c)   executing the application on the development system;

(d)   ensuring that the application adequately utilizes the emulation object; and

(e)   executing the application on the point of sale equipment;

wherein when the application is executed on the development system, the emulation module and the application emulate the interaction between the application and the device that occurs when the application is executed on the point of sale equipment; and

wherein the device is specialized for the point of sale equipment.

8. (Amended) A system, including an operating system, for developing an application for use with point of sale equipment having a device, the application interfacing with the operating system and capable of utilizing the device when the application is executed on the point of sale equipment, the system comprising:

an emulation module interfacing directly with the operating system and corresponding to the device; and

means for ensuring that the application will utilize the emulation module when the application is executed on the development system;

wherein when the application is executed on the system, the emulation module and the application emulate the interaction between the application and the device that occurs when the application is executed on the point of sale equipment; and

wherein the device is specialized for the point of sale equipment.

14. (Amended) A computer readable medium containing at least one program for testing an application on a development system having an operating system, the application for use with point of sale equipment having a device, the application interfacing with the operating system and being capable of utilizing the device when the application is executed on the point of sale equipment, the program containing instructions for:

providing an emulation module interfacing directly with the operating system and corresponding to the device;

wherein the application is capable of utilizing the emulation module in lieu of the device when the application is executed on the development system and;

wherein when the application is executed on the development system, the emulation module and the application emulate the interaction between the application and the device that occurs when the application is executed on the point of sale equipment;

wherein the device is specialized for the point of sale equipment.

15. (Amended) A computer readable medium containing at least one program for facilitating development of an application on a development system having an operating system, the application for use with point of sale equipment having a device, the application interfacing with the operating system and being capable of utilizing the device when the application is executed on the point of sale equipment, the program containing instructions for:

emulating the interaction between the application and the device using an emulation module interfacing directly with the operating system;

allowing a developer to provide input; and

providing the input to the application in a form expected from the device;

wherein the device is specialized for the point of sale equipment.